

CLAIMS

We claim:

- 1 1. In a vehicle controller having a microprocessor connected to a reprogrammable
2 memory for storing an application program and to a communications port for
3 communicating with a reprogramming device, a flashloader firmware comprising:
4 a standard module for receiving programming instructions and the application program
5 via the communications port;
6 an MCU module for writing the received application program to the reprogrammable
7 memory; and
8 an ECU module for determining whether a valid application program has been stored in
9 the reprogrammable memory;
10 wherein upon detection of a valid application program the microprocessor executes
11 instructions from the reprogrammable memory and upon detection of an invalid
12 application program the microprocessor continues to execute instructions from the
13 flashloader.
- 1 2. The vehicle controller flashloader firmware of claim 1 further comprising the
2 ECU module being operative to place the vehicle controller in one of a low power
3 state and a power-down state.

1 3. The vehicle controller flashloader of claim 2 further comprising the ECU module
2 being operative to place the vehicle controller in one of a low power state and a
3 power-down state after a predetermined amount of time.

1 4. The vehicle controller flashloader of claim 2 further comprising the ECU module
2 being operative to periodically attempt to place the vehicle controller in one of a
3 low power state and a power-down state when the software module expects
4 programming instructions to arrive via the communications port and the
5 programming instructions have been received after the predetermined amount of
6 time.